AMENDMENTS TO THE CLAIMS

Claims 1-40. (Canceled.)

41. (Currently amended) A vessel filter including a conductor loop that forms the inductance of an electrical resonance circuit, wherein the conductor loop (11a, 11b; 21a-f; 41) is a unitary piece and forms the vessel filter (10; 20; 40), and wherein the electrical resonance circuit has a resonance frequency that corresponds to the frequency of an external magnetic field of an MR tomorgraph .

42. (Previously presented) The vessel filter according to Claim 41, wherein there is at least one integrated circuit coupled to the resonance circuit so that it is adjustable or tunable by the integrated circuit.

43. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a-f; 41) has individual sections (14, 14a-d; 24; 301a-c; 44) and spacers and/or insulators, in which the spacers and/or insulators keep the individual sections (14, 14a-d; 24; 301a-c; 44) of the conductor loop at a spacing from each other and/or insulate them relative to each other.

44. (Previously presented) The vessel filter according to Claim 43, wherein the insulators simultaneously form an internal capacitance in conjunction with at least one conductor loop (11a, 11b; 21a-f; 41).

45. (Currently amended) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a-f; 41) is enclosed with a nonconductor~~, especially plastic and/or ceramic~~ .

46. (Currently amended) The vessel filter according to Claim 45, which further includes a capacitance that is adjusted ~~within a liquid~~ via the ~~enclosure~~ nonconductor with a certain layer thickness.

47. (Canceled)

48. (Currently amended) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a-f; 41) has at least one electrically nonconducting material, on whose surface at least one conductor material~~, especially gold, platinum, tantalum and/or conducting alloys, is applied~~ .

49. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a-f; 41) is deployable.

50. (Previously presented) The vessel filter according to Claim 49, wherein the conductor loop (11a, 11b; 21a-f; 41) is deployable during and/or after implantation in a body.

51. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a-f; 41) has several conductor loop windings (14, 14a-d) guided so that the conductor loop (11a, 11b; 21a-f; 41) forms an elongated base (12a-e) that is sealed on at least one side with a screen-like filter cage (13a-d).

52. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (20; 40) includes a plurality of conductor loop windings (24a-c; 301a-e, 304, 304b; 44) guided so that the greatest spacing of the conductor loop windings (24a-c; 301a-e, 304, 304b; 44) from each other is present in the center of the vessel filter (24; 40) and has a reduced spacing of the conductor loop windings (24a-c, 301a-e, 304, 304b; 44) from each other on at least one edge side.

53. (Previously presented) The vessel filter according to Claim 52, wherein the spacing of the conductor loops windings (24a-c; 301a-e, 304, 304b; 44) from each other is reduced toward edge sides relative to the center of the vessel filter (20; 40).

54. (Currently amended) The vessel filter according to Claim 41, wherein the vessel filter (40) includes a plurality of conductor loop windings (44) that merge on one side of the filter in a filter cage (53) and extend ~~leg-like~~ to the other side of the filter.

55. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (40) has at least one conductor loop winding (44) forming at least one extension (46) that serves for connection of the filter to a vessel wall.

56. (Currently amended) The vessel filter according to Claim 55, wherein adjacent regions of the conductor loop winding (44) are guided at ~~limited~~ spacing from each other in extension (46).

57. (Currently amended) The vessel filter according to Claim 55, wherein adjacent regions of conductor loop winding (44) are connected without intermediate space to each other in extension (46) ~~, especially are produced from one piece, welded, soldered or pressed~~ .

58. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (10; 20; 40) forms a double-filter in which the respective ends of the conductor loops each form a filter cage (13a, 13b; 22a, 22b).

59. (Previously presented) The vessel filter according to Claim 41, wherein the conductor loop (21a, 21b, 21d-f; 41) has individual windings that extend in the longitudinal direction of the vessel filter (10; 20; 40).

60. (Currently amended) The vessel filter according to Claim 41, wherein the vessel filter (10; 20; 40) has at least one brace (47) ~~for fastening of the vessel filter (10; 20; 40)~~ which is connected to conductor loop (11a, 11b; 21a, 21b, 21d-f; 41).

61. (Currently amended) The vessel filter according to Claim 60, wherein said at [[lest]] least one brace (47) is conducting and is connected conducting with said conductor loop (11a, 11b; 21a, 21b, 21d-f; 41).

62. (Previously presented) The vessel filter according to Claim 60, wherein said at least one brace (47) is movably connected to individual conductor loop windings (44).

63. (Previously presented) The vessel filter according to Claim 55 which further includes at least one brace (47) for fastening of the vessel filter, wherein said extension (46) is moveably arranged relative to brace (47).

64. (Previously presented) The vessel filter according to Claim 60, wherein said at least one brace (47) is made of bioresorbable material.

65. (Currently amended) The vessel filter according to Claim 41 which further includes at least one semiconductor element ~~, especially a diode (D1-D4, D3', D4') and/or a transistor and/or an integrated circuit,~~ that is formed on said vessel filter (10; 20; 40).

66. (Currently amended) The vessel filter according to Claim 41, wherein the conductor loop (11a, 11b; 21a, 21b, 21d-f; 41) is formed from a single material piece ~~, especially a tube, wire or electrically-conducting plastic~~ .

67. (Previously presented) The vessel filter according to Claim 41, wherein the one conductor loop (11a, 11b; 21a, 21b, 21d-f; 41) is produced by repeated lengthwise cutting of a tube (309) and then expansion.

68. (Currently amended) The vessel filter according to Claim 66, wherein the conductor loop (11a, 11b; 21a, 21b, 21d-f; 41) is guided on the ends of the single material piece~~, meander-like~~ .

69. (Currently amended) The vessel filter according to Claim 41, wherein the conductor loop includes windings (14, 14a-d; 24; 301a-c; 44) that are joined on the ends ~~by welding, gluing, clamping, sealing and/or shape-mating, especially by thermally initiated shrinkage of a cylinder of shape memory material~~ .

70. (Currently amended) The vessel filter according to Claim 69, wherein at least one conductor loop winding (14, 14a-d; 24; 301a-c; 44) is provided with at least one hook~~, for example, an anchoring hook,~~ for fastening in a vessel wall.

71. (Previously presented) The vessel filter according to Claim 41, wherein the vessel filter (10; 20; 40) has at least one connection device (28, 28a; 48a, 48b) for coupling to a device for introduction and/or extraction of the filter.

72. (Currently amended) The vessel filter according to Claim 41, wherein the vessel filter (10; 20; 40) contains at least one [[means]] connection device (28a) constructed and arranged for braking of the filter during introduction into the body.

73. (Previously presented) The vessel filter according to Claim 71, wherein the connection device (28, 28a; 48a, 48b) is constructed and arranged so that it simultaneously creates a braking device (28a) for the braking of the filter during introduction into the body.